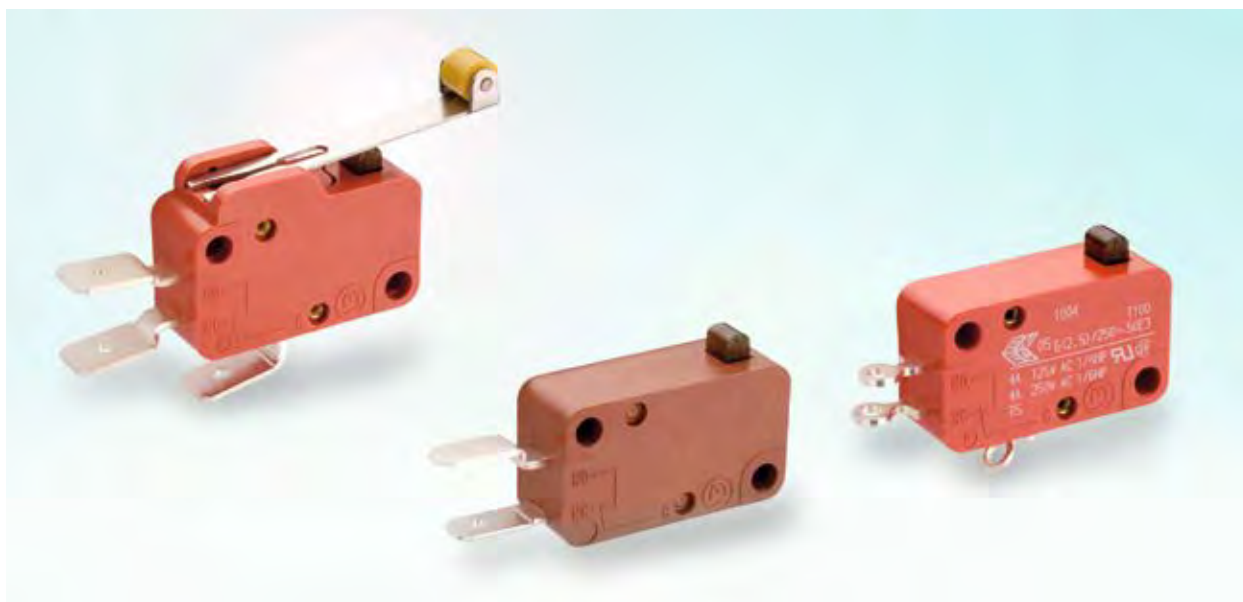




## SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC



### PRODUCT FEATURES

- Friction contact system whose shearing movement can loosen welding
- Very high inrush currents (capacitive)
- Contact distances less and greater than 3 mm
- Operating forces from 0.2 to 4.2 N

### ON REQUEST

- Material conformant with the filament wire test acc. to IEC 60335-1:2001 chap. 30
- Side bearing terminal
- Electrical rating 16 (16) A 250 V 5E4 for normally closed and normally open version

|                                                                                                                                 |                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                                                                                                                          | DIN 41635 A                                                                                                                                                                                                                                                     |
| Mechanical life endurance                                                                                                       | 5E6 version with lever or contact spacing > 3 mm<br>10E6 standard version<br>5E4 version with curved spring steel lever                                                                                                                                         |
| Contact resistance (new condition)                                                                                              | < 100 mOhm (1 A 12 V DC)                                                                                                                                                                                                                                        |
| Insulation resistance (new condition)                                                                                           | > 100 MOhm (500 V DC)                                                                                                                                                                                                                                           |
| Proof tracking                                                                                                                  | 250 PTI                                                                                                                                                                                                                                                         |
| Ambient temperature                                                                                                             | -40 °C ... +100 °C on request ... +125 °C ... +85 °C                                                                                                                                                                                                            |
| Flammability                                                                                                                    | UL 94 (housing: V-0, actuator: V-2)<br>UL 94 V-2                                                                                                                                                                                                                |
| Glow wire test temperature                                                                                                      | 850 °C                                                                                                                                                                                                                                                          |
| Material additional actuator<br>housing<br>terminals                                                                            | galvanized steel / spring steel / stainless steel<br>Duroplast type 182 / PA glass fiber-reinforced / PA Latamid<br>silver plated / chromated                                                                                                                   |
| Bounce time                                                                                                                     | < 10 ms                                                                                                                                                                                                                                                         |
| Approval marks                                                                                                                  |  /  /  |
| Suitable for appliances of protection class II under compliance with the installation conditions required on the equipment side |                                                                                                                                                                                                                                                                 |

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH 'N' DRIVE



# SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC

|                                                                                   |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
|-----------------------------------------------------------------------------------|--|--|--|--------------------------------|--|--|------------------------------|--|--|--|--|--|------------------------------------|--|--|--|--|--|
|  |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 21 (8) A 250 V AC 25E3                                                            |  |  |  | Normally closed contact (SPNC) |  |  | Normally open contact (SPNO) |  |  |  |  |  | Changeover switch (SPDT momentary) |  |  |  |  |  |
| 20 (4) A 400 V AC 1E4                                                             |  |  |  | 1005.1105                      |  |  | 1005.2809                    |  |  |  |  |  | 1005.0404                          |  |  |  |  |  |
| 16 (16) A 250 V AC 5E4                                                            |  |  |  | 1005.1101                      |  |  | 1005.1207                    |  |  |  |  |  | 1005.1004                          |  |  |  |  |  |
| 16 (4) A 400 V AC 5E4                                                             |  |  |  | 1006.3402                      |  |  | 1005.1226                    |  |  |  |  |  |                                    |  |  |  |  |  |
| 16 (4) A 250 V AC 5E4                                                             |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 16 (4) A 250 V AC 25E3                                                            |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 12 (12) A 250 V AC 5E4                                                            |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 10 (6) A 250 V AC 5E4                                                             |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 10 (4) A 400 V AC 1E4                                                             |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 10 (4) A 250 V AC 5E4                                                             |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 8 (8) A 250 V AC 5E4                                                              |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 6 (2.5) A 400 V AC 5E4                                                            |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 6 (2.5) A 250 V AC 5E4                                                            |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 21 A 250 V AC 2 HP                                                                |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 21 A 125 V AC 1 HP                                                                |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 16 A 250 V AC 2 HP                                                                |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 16 A 125 V AC 1 HP                                                                |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 16 A 125 - 250 V AC 1/2 HP                                                        |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 10 A 125 - 250 V AC 1/2 HP                                                        |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 10 A 125 - 250 V AC 1/4 HP                                                        |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 8 A 125 - 250 V AC 1/3 HP                                                         |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| 4 A 125 - 250 V AC 1/6 HP                                                         |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Terminal type                                                                     |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Terminal description                                                              |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Contact distance (mm)                                                             |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Contact material                                                                  |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Operating force (N)                                                               |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Operating position (OP) (mm)                                                      |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Difference travel max. (mm)                                                       |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Free position (FP) max. (mm)                                                      |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Permissible total travel position (TP) (mm)                                       |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Actuator description                                                              |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Lever drawing                                                                     |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Miscellaneous                                                                     |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |
| Stock version                                                                     |  |  |  |                                |  |  |                              |  |  |  |  |  |                                    |  |  |  |  |  |

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SENSORS

ECO

PUSH'N'DRIVE



# SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC

|                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|
|  | Changeover switch (SPDT momentary)                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       | 1006.1514                                                                             | 1005.0507                                                                             | 1005.1010                                                                             | 1004.0509                                                                             | 1005.0101                                                                             | 1005.0401                                                                             | 1005.1001                                                                             | 1005.3501                                                                             | 1006.0701                                                                             | 1006.0901                                                                             | 1006.1011                                                                             | 1006.1101                                                                             | 1006.1201                                                                             | 1006.1301                                                                             | 1006.1401                                                                             |                                                                                       |      |
| 21 (8) A 250 V AC 25E3                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 20 (4) A 400 V AC 1E4                                                             | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 (16) A 250 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 (4) A 400 V AC 5E4                                                             | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 (4) A 250 V AC 5E4                                                             |                                                                                     |                                                                                     | o                                                                                   |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 (4) A 250 V AC 25E3                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 12 (12) A 250 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 10 (6) A 250 V AC 5E4                                                             | o                                                                                   | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 10 (4) A 400 V AC 1E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                     | o                                                                                     |                                                                                       | o                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     |      |
| 10 (4) A 250 V AC 5E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 8 (8) A 250 V AC 5E4                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 6 (2.5) A 400 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                     | o                                                                                     |                                                                                       | o                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     |      |
| 6 (2.5) A 250 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 21 A 250 V AC 2 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 21 A 125 V AC 1 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 A 250 V AC 2 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 A 125 V AC 1 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 16 A 125 - 250 V AC 1/2 HP                                                        | o                                                                                   | o                                                                                   |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 10 A 125 - 250 V AC 1/2 HP                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 10 A 125 - 250 V AC 1/4 HP                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                     | o                                                                                     |                                                                                       | o                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     |      |
| 8 A 125 - 250 V AC 1/3 HP                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| 4 A 125 - 250 V AC 1/6 HP                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| Terminal type                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| Terminal description                                                              | 6.3                                                                                 |                                                                                     |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     |                                                                                     |                                                                                     | M3                                                                                    |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| Contact distance (mm)                                                             | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | > 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   | < 3                                                                                   |      |
| Contact material                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag                                                                                    | Ag   |
| Operating force (N)                                                               | 1.2 - 2.1                                                                           | 2.4 - 3.8                                                                           | 2.4 - 3.8                                                                           | 2.4 - 3.8                                                                           | 0.8 - 1.8                                                                           | 1.5 - 2.5                                                                           | 1.5 - 2.5                                                                           | 1.5 - 2.5                                                                           | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             | 1.5 - 2.5                                                                             |      |
| Operating position (OP) (mm)                                                      | 20.8 ± 1.2                                                                          | 14.7 ± 0.5                                                                          | 14.4 ± 0.3                                                                          | 14.4 ± 0.3                                                                          | 14.7 ± 0.5                                                                          | 14.7 ± 0.5                                                                          | 14.7 ± 0.5                                                                          | 14.7 ± 0.5                                                                          | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            | 14.7 ± 0.5                                                                            |      |
| Difference travel max. (mm)                                                       | 0.9                                                                                 | 0.3                                                                                 | 1.2                                                                                 | 0.1 - 0.25                                                                          | 0.3                                                                                 | 0.3                                                                                 | 0.3                                                                                 | 0.3                                                                                 | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   | 0.3                                                                                   |      |
| Free position (FP) max. (mm)                                                      | 23.5                                                                                | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    | 16                                                                                    |      |
| Permissible total travel position (TP) (mm)                                       | 18                                                                                  | 13.4                                                                                | 13.4                                                                                | 13.4                                                                                | 13.4                                                                                | 13.4                                                                                | 13.4                                                                                | 13.4                                                                                | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4                                                                                  | 13.4 |
| Actuator description                                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| Lever drawing                                                                     | L12                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| Miscellaneous                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | milled bearing blade                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |      |
| Stock version                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                     | o                                                                                     |                                                                                       | o                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o                                                                                     | o    |

ROCKER SWITCHES  
PUSHBUTTON SWITCHES  
TOGGLE SWITCHES  
SLIDE SWITCHES  
ROTARY SWITCHES  
FOOT SWITCHES  
TACT AND KEY SWITCHES  
SNAP-ACTION SWITCHES  
MICRO-SIGNAL SWITCHES  
SENSORS  
ECO  
PUSH IN DRIVE



## SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC

|                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | Changeover switch (SPDT momentary)                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 21 (8) A 250 V AC 25E3                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1006.1511                                                                           |
| 20 (4) A 400 V AC 1E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1006.1801                                                                           |
| 16 (16) A 250 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1006.4103                                                                           |
| 16 (4) A 400 V AC 5E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1006.4203                                                                           |
| 16 (4) A 250 V AC 5E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1004.4601                                                                           |
| 16 (4) A 250 V AC 25E3                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1004.0402                                                                           |
| 12 (12) A 250 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1004.1002                                                                           |
| 10 (6) A 250 V AC 5E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 10 (4) A 400 V AC 1E4                                                             | o                                                                                   | o                                                                                   | o                                                                                   | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| 10 (4) A 250 V AC 5E4                                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |
| 8 (8) A 250 V AC 5E4                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 6 (2.5) A 400 V AC 5E4                                                            | o                                                                                   | o                                                                                   | o                                                                                   | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| 6 (2.5) A 250 V AC 5E4                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   | o                                                                                   |
| 21 A 250 V AC 2 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 21 A 125 V AC 1 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 16 A 250 V AC 2 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 16 A 125 V AC 1 HP                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 16 A 125 - 250 V AC 1/2 HP                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 10 A 125 - 250 V AC 1/2 HP                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| 10 A 125 - 250 V AC 1/4 HP                                                        | o                                                                                   | o                                                                                   | o                                                                                   | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| 8 A 125 - 250 V AC 1/3 HP                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   |                                                                                     |                                                                                     |
| 4 A 125 - 250 V AC 1/6 HP                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   | o                                                                                   |
| Terminal type                                                                     |  |  |  |  |  |  |  |
| Terminal description                                                              | 6.3                                                                                 | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 |                                                                                     | 6.3                                                                                 |
| Contact distance (mm)                                                             | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 | < 3                                                                                 |
| Contact material                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  | Ag                                                                                  |
| Operating force (N)                                                               | 0.7 - 1.25                                                                          | 1.5 - 2.5                                                                           | 1.5 - 2.5                                                                           | 1.5 - 2.5                                                                           | 0.5 - 1.1                                                                           | 0.2 - 0.6                                                                           | 0.2 - 0.6                                                                           |
| Operating position (OP) (mm)                                                      | 20.8 ± 1.2                                                                          | 22 ± 1                                                                              | 20.8 ± 0.5                                                                          | 20.8 ± 0.5                                                                          | 20.8 ± 0.5                                                                          | 14.7 ± 0.5                                                                          | 14.7 ± 0.5                                                                          |
| Difference travel max. (mm)                                                       | 0.9                                                                                 | 0.6                                                                                 | 0.3                                                                                 | 0.3                                                                                 | 0.3                                                                                 | 0.3                                                                                 | 0.3                                                                                 |
| Free position (FP) max. (mm)                                                      | 23.5                                                                                | 24.5                                                                                | 22.1                                                                                | 22.1                                                                                | 22.1                                                                                | 16                                                                                  | 16                                                                                  |
| Permissible total travel position (TP) (mm)                                       | 18                                                                                  | 18.5                                                                                | 19.5                                                                                | 19.5                                                                                | 19.5                                                                                | 13.4                                                                                | 13.4                                                                                |
| Actuator description                                                              |  |  |  |  |  |  |  |
| Lever drawing                                                                     | L12                                                                                 | L31                                                                                 | L11                                                                                 | L11                                                                                 | L11                                                                                 |                                                                                     |                                                                                     |
| Miscellaneous                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | milled bearing blade                                                                | milled bearing blade                                                                | milled bearing blade                                                                |
| Stock version                                                                     | o                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | o                                                                                   | o                                                                                   |

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MIKRO-SIGNALSCHALTER

SENSORS

ECO

PUSH'N'DRIVE

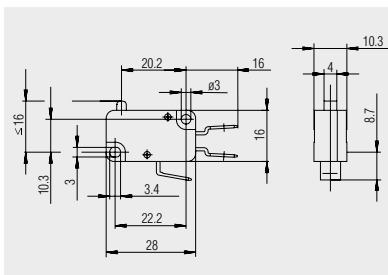


## SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

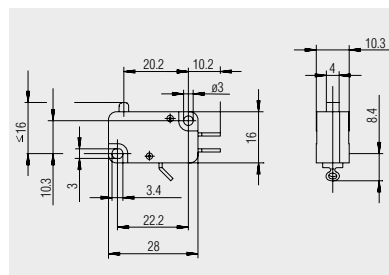
TO 21 (8) A 250 V AC



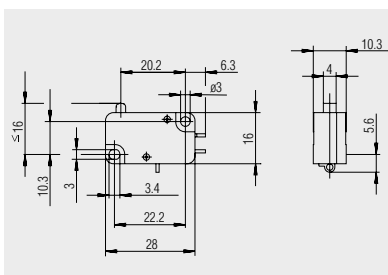
Basic type 1005



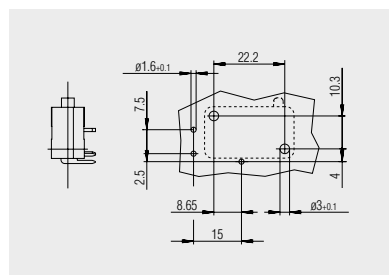
Quick-connect terminal 6.3 x 0.8



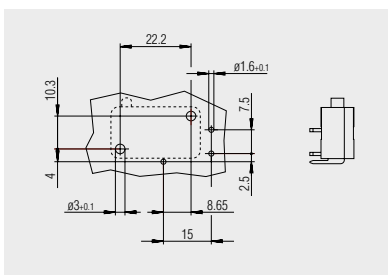
Solder terminal



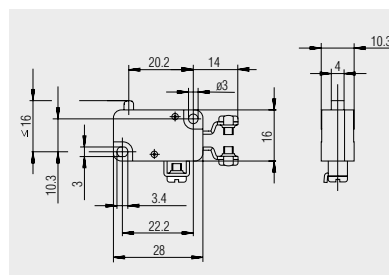
Short solder terminal



PCB terminal (cover side)  
right angled



PCB terminal (base side)  
left angled



Screw terminal M3

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH 'N' DRIVE

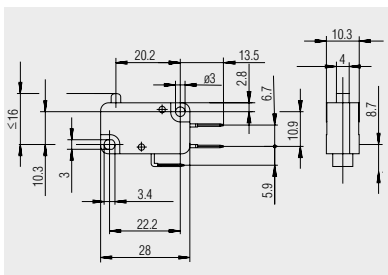


## SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

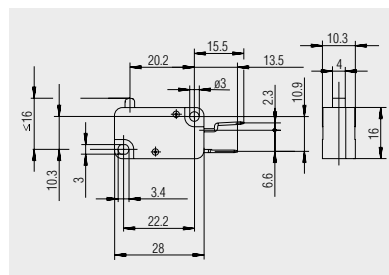
T0 21 (8) A 250 V AC



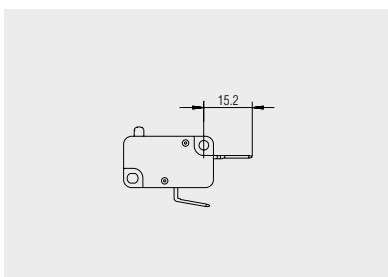
Basic type 1005



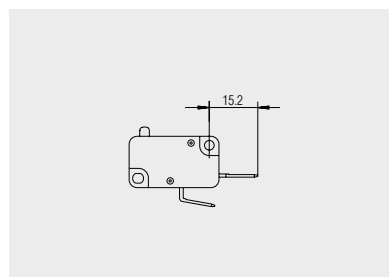
Quick-connect terminal 4.8 x 0.8 straight



Quick-connect terminal 4.8 x 0.8 top side



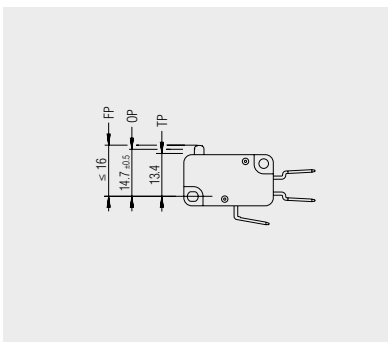
Quick-connect terminal 6.3 x 0.8 normally open contact version



Quick-connect terminal 6.3 x 0.8 normally closed contact version



Basic types 1004 and 1005 switching positions



FP: free position  
OP: operating position  
TP: permissible total travel position

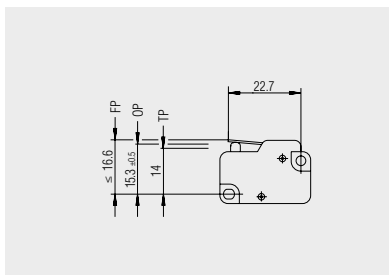


## SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

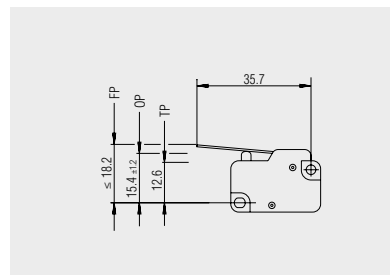
TO 21 (8) A 250 V AC



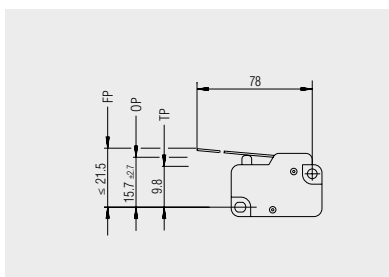
Basic type 1006  
auxiliary actuator



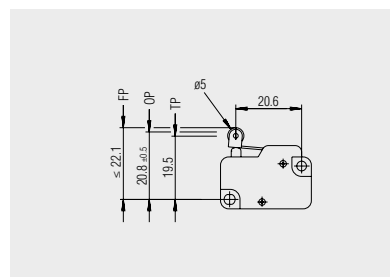
L01: straight lever



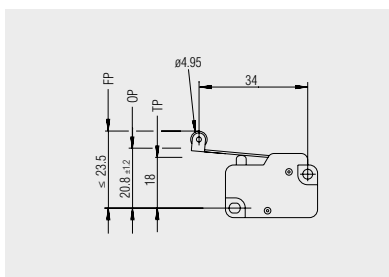
L02: straight lever



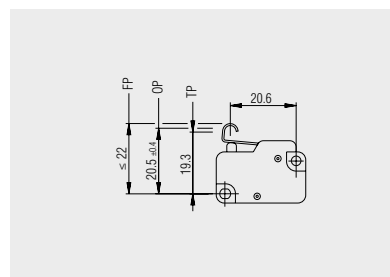
L04: straight lever



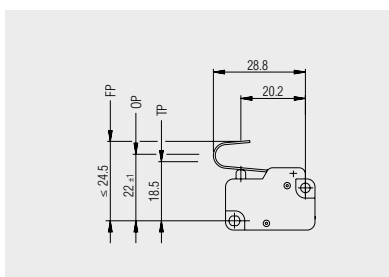
L11: roller lever



L12: roller lever



L21: simulated roller



L31: spring lever

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH 'N' DRIVE

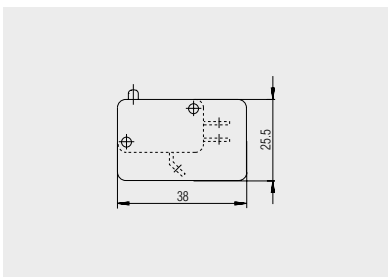


## SERIES 1005 - MINIATURE SNAP-ACTION SWITCHES

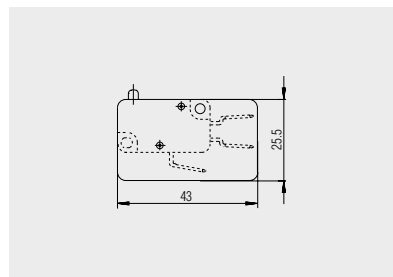
TO 21 (8) A 250 V AC



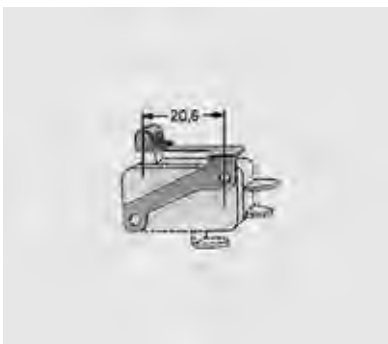
Additional parts



Insulating plate for solder terminal  
0.5 mm: 231.009.011



Insulating plate for quick-connect terminal  
0.5 mm: 231.010.011  
0.8 mm: 231.010.021



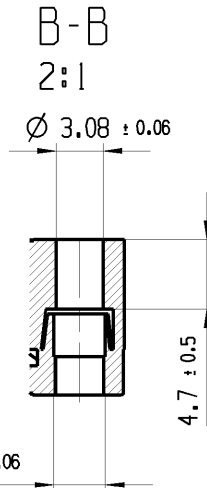
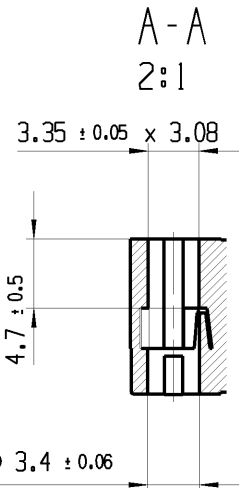
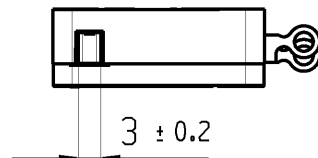
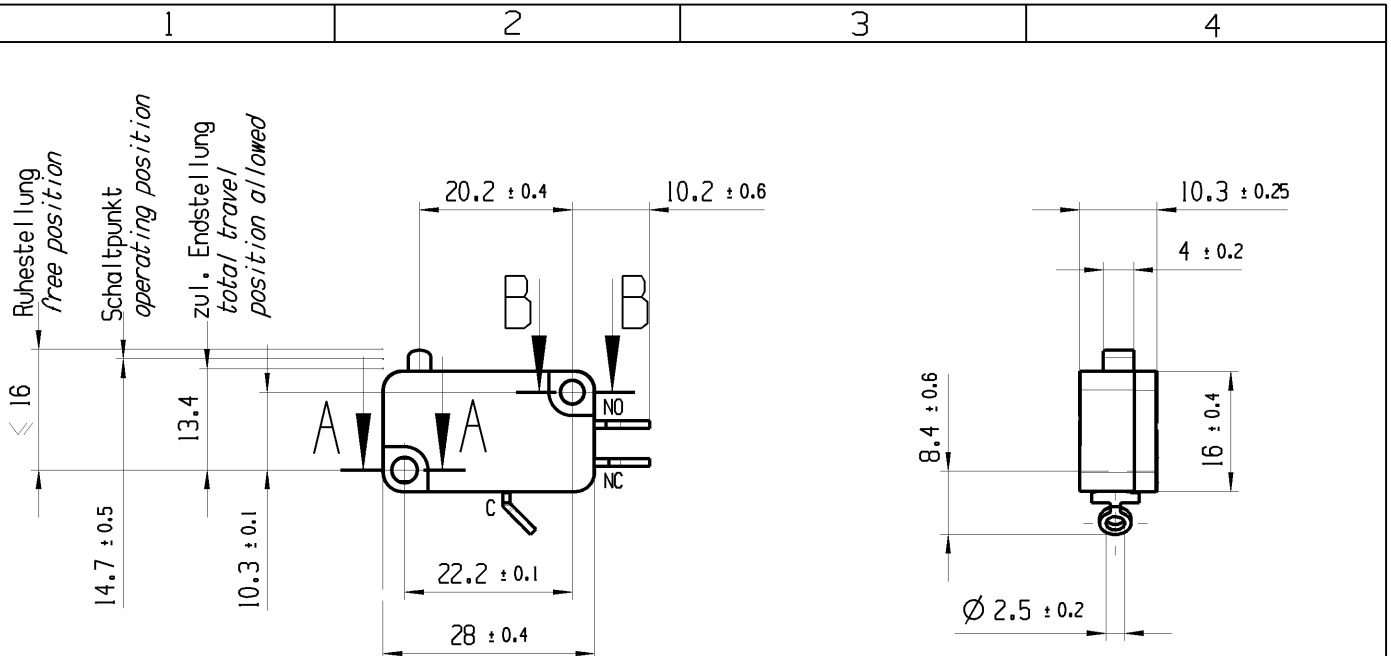
191.013.013

Stainless spring steel

Lever 20.6 long with roller diameter  
5 out of PA yellow (to be mounted  
lateral with the switch using screws)

Further information under

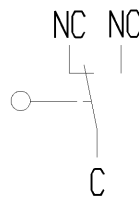
[WWW.MARQUARDT-SWITCHES.COM](http://WWW.MARQUARDT-SWITCHES.COM)



Aufschrift  
Marking

1005 µ T100  
20141/400~10E3  
16141/400~50E3  
10161/250~50E3  
16A 125V AC 1/2HP  
16A 250V AC 1/2HP  
R109

Hersteldatum:  
Werk / Herstelljahr / -woche  
nach DIN EN 60062  
data code of manufacture:  
site / year / week acc. to DIN EN 60062



Wechsler 1-polig  
single pole changeover

Schalt-Betaetigungskraft 2.4 bis 3.8 N  
actuating force 2.4 up to 3.8 N

Differenzweg  
movement differential ≤ 0.3 mm

| fuer Form und Lage FOR SHAPE AND LOC. |  | Allgemeintoleranzen UNTOLERANCED DIMENSIONS |  | Pause COPY    |  | Blatt SHEET 01              |  | TYP Zeichn./DRAWING NO. Index                    |  |
|---------------------------------------|--|---------------------------------------------|--|---------------|--|-----------------------------|--|--------------------------------------------------|--|
| K                                     |  | 10050404                                    |  | d             |  | Original Din A4             |  | K 10050404 d                                     |  |
| SCHNAPPSCHALTER                       |  | snap action switch                          |  | CAD: NX v6.0  |  | gepr./DRAWN BY 20.09.12 ZES |  | Ersatz fuer/REPLACEMENT OF Zg.gl.Nr.v.08.12.1999 |  |
| Ausg. ISSUE                           |  | Aenderung REVISION                          |  | gez. DRAWN BY |  | Ausg. ISSUE                 |  | Aenderung REVISION                               |  |
| c 28825                               |  | 08.12.99                                    |  | PFU           |  | WA                          |  | d 80501                                          |  |
| b 20923                               |  | 27.06.91                                    |  | WA            |  | WA                          |  | 04.03.13                                         |  |
| a 19596                               |  | 15.09.89                                    |  | WA            |  | ZES                         |  |                                                  |  |
|                                       |  | 22.09.88                                    |  | WA            |  |                             |  |                                                  |  |